

UNIVERSITY OF LIFE SCIENCES "KING MIHAI I" FROM Timisoara **Multidisciplinary Conference on Sustainable Development** 15 – 16 May 2025



THE EVALUATION OF BIRTH WEIGHT OF CALVES IN A SELECTED BREEDING HERD OF THE SLOVAK SPOTTED CATTLE Jozef BUJKO^{*1}, Juraj CANDRÁK¹, Peter STRAPÁK², Radovan KASARDA¹ ¹Institute of Nutrition and Genomics, ²Institute of Animal Husbandry, Faculty of Agrobiology and Food Resources, Slovak University of Agricultural in Nitra,

Abstract: Growth traits of calves such as birth weight (BW) is of primary economical importance for the cow calf producer and for the farmers in general as shown others authors. The aim of the study was to evaluate the calf birth weight (BW) of the Slovak Spotted calves in Eastern Slovakia according to years of birth, period of bird, the sex and breed type.

Introduction

Growth traits of calves such as birth weight (BW) is of primary economical importance for the cow calf producer and for the farmers in general as shown others authors.

Material and method

In this study was used the records from 2020 to 2022 and 763 calves from Slovak Spotted cattle for the birth weight (BW).

According to the years of evaluation, we found the average weight for calves birth was 38.7±6.1kg in 2020, 39.3±6.7 kg in 2021 and 40.1±6.9 kg in 2022, respectively. The average BW of calves by sex was 40.8 ±6.8 kg for bulls and 37.6±6.7 kg for heifers, with a similar trend for individual years, with slightly increasing average weights for both sexes. The linear model to represent $R^2 =$ 0.2927% in case of BW of calves for all fixed effects.

Results and discussions

The average value of BW of calves was 39.4±6.7 kg, ranging from 17 to 58 kg. In the evaluated set, the most recurrent mean weight was 40 kg.

Acknowledgement: This work was supported by the Slovak Research and Development Agency (Projects No. APVV-20-0161, VEGA No. 1/0316/25) and project Erasmus+ 2021-1-SK01-KA220-HED-000032068 (ISAGREED).

•Conclusions

In conclusion, our results show the most significant effect of sire factor on calf birth weight which is confirmed by statistical significance